

WORKSHOP BCN24

“A journey into brain activity”

From EEG and related potentials to connectivity and source modeling

Invited expert speakers

Dr. JM Azorín, Head of Brain-Machine Interface Systems Lab -BMILab at Miguel Hernández University

Dr. LL Blanch, Director of Research and Innovation of the Consortium Corporació Sanitària Parc Taulí of Sabadell (I3PT)

HYBRID WORKSHOP LIMITED PLACES!

In Streaming or In-person. [More info](#). Bioart.group@upc.edu



Join us now, whether you're a seasoned professional, student, or beginning your journey and interested in Brain Activity

Why to connect to this workshop?

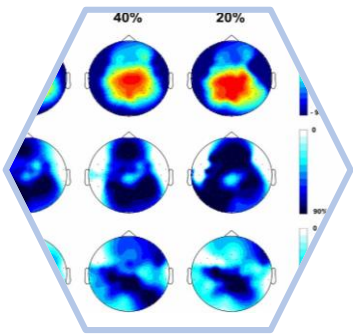
This workshop is organized in the framework of the European [HybridNeuro Project](#) (funded by the European Commission by grant 101079392), and this is prepared and given by the [BIOART Group](#) (from the [Biomedical Engineering Research Center](#) and [Automatic Control Department](#)) at the [UPC](#).

It will be held at the [Barcelona School of Industrial Engineering \(ETSEIB\)](#).

This is a valuable chance to expand your knowledge, connect with like-minded peers, and explore the frontiers of brain research and technology. **Attendees are limited.**

Hands-on methodology

- ✓ **3 days of lectures** during the morning and **hands-on training** sessions with demos, and active participation during the afternoon.
- ✓ **Networking with reference professionals from hospitals, companies and research centers**, fostering collaboration and sharing cutting-edge neurotechnology advancements and research during the last day.
- ✓ **You can register each day separately**, even morning and afternoon, and lunch being all **free of charge**. The main aim is to **promote open science** through the **Horizon Europe Program**. If you cannot assist in-person, you can follow us **by streaming**, but registration is also necessary.



REGISTER NOW

	DAY	Tuesday 6 th Feb	Wednesday 7 th Feb	Thursday 8 th Feb	Friday 9 th Feb
		EEG signal acquisition and preprocessing	ERP and MRCP studies and movement intention for device control	Source localization and brain connectivity	Networking with hospitals, companies, and research centers
Expert lectures	09:30-10:00		Related cortical potentials measured by EEG: ERPs and MCRPs		What HybridNeuro Hub can do for you and you for it
	10:00-10:30	Presentation of HybridNeuro Action and UPC	Computerized computing tasks: cognitive and motor exercises	EEG source imaging: a practical review	Future HealthTech requires integration of disciplines and stakeholders (Keynote)
	10:30-11:00				Tech Transfer from research to industry (Keynote)
	11:00-11:30	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
	11:30-12:30	Types of EEG artifacts and how to handle with them	ML and DL methods for movement imaginary BCI: Challenges and future directions	Introduction to functional Brain connectivity	Hospitals and companies presentations
	12:30-13:30	Artifact rejection and reduction by signal processing	Neuro-interfaces for interacting with robotics exoskeletons	Brain networks analysis using graph theory parameters	Round Table: How to look for synergies between scientists, companies, and hospitals
13:30-15:00	LUNCH	LUNCH	LUNCH	LUNCH	
HoT	15:00-17:00	Artifact reduction using software packages	A MRCP study: experiment preparation, recording and analysis	Practicing brain source localization and functional connectivity	